

SPECIFICATION AMENDMENTS

Please enter the following amendments to the specification.

Please amend the paragraph beginning at line 16 on page 2 of the application as follows:

Since the complete wrapping of the bale only ensues in a downstream film wrapping device, the bale of the devices known from prior art has to be kept together in a stable shape by the net web or the yarn at least on its circumference (on the surface area) for being transported between the round bale press and the film wrapping device. Thus, a net tissue web for covering round ~~balls~~ bales of this kind is known from DE 36 12 223 A1.

Please amend the paragraph beginning at line 21 on page 2 of the application as follows:

In summary, it has hence to be stated that the actually known pressed round bales are always wrapped with a net web or a yarn on their circumferential bale area or surface area, prior to being completely wrapped with a film. This ~~proceeding procedure~~ exhibits several disadvantages. ~~Thus~~ First, several packing materials have to be kept stored in a packing plant. Moreover, in the case ~~[[o]]~~ of the wrapping of the pressed round bale with a net web or a yarn on its surface area, the risk of looser components of the pressed bale falling out through the net or the yarn during transportation from the round bale press to the downstream film wrapping device is rather high, a fact which can lead to a dirt accumulation in the plant and, in the worst case, to functional failure of the individual contrivances present therein. For a tight wrapping of the entire round bale with film, the film overlapping has to be conceived relatively large, whereby in the actually used film wrapping method – which will be explained in detail in the following – thick film accumulation arise at the front ends of the round bale. The film wrapping of the entire round bale ensues in such a way that the pressed round bale lying on a wrapping table is uniformly rotated about its symmetry axis, while either a film roll rotates about a vertical axis about the round bale, or, in case of a stationary film roll, the round bale is in addition rotated about its vertical axis. Caused by the inevitably necessary large film overlapping for achieving a tight packing, the film consumption per bale is relatively high. ~~Therewith, however~~ Therefore, the packing costs per finished round bale are high, as well.

Please amend the paragraph beginning at line 19 on page 3 of the application as follows:

The inventive method is characterized in that during the unwinding of a film web from a film roll, a film rope is formed from the wide film web over the entire width during a predetermined period of time by means of pulling-off means, said film rope being advantageously gathered up in its width. Under film rope, here, a film portion has to be understood in a general manner, which has in some way been formed from the present film web and which exhibits a higher flexural rigidity. Thereby, the normally present adhesiveness of the film is optionally used. It has, however, to be emphasized, that if the case may be, a non-adhesive film can be used, ~~as~~ as well, which prior to the forming of the film rope, is modified by acting upon the film material (heat treatment, application of a chemical substance, application of an adhesive, etc.) in a way that joined film parts adhere to one another.

Please amend the paragraph beginning at line 3 on page 4 of the application as follows:

At the forming of this film rope of higher rigidity extending over a partial section of the film web length, i.e. over a determined length of the film web, it is possible for the first time to use a film as an enveloping material for a pressed round bale instead of the previous net or yarn web. By means of the rope formation, the film can be introduced into the gap between the pressed round bales and the circumferential press wall formed by any device. By then rotating the bales again in the press, the film is wrapped over the bale surface area with engagement and carriage of the film rope, and namely in the full width of the film web, such as it was hitherto already realized with the net web. By forming a single layer or ~~a multilayer~~ multiple layers on the circumferential bale wall, a sufficient stability of shape and strength for the further transportation of the bale to the film wrapping device is given, wherein the prepared bale is completely wrapped with film. All hitherto made attempts to replace the previously necessary net web with film, were insofar unsuccessful due to the at least unilaterally adhesive film, said very thin film could not be applied without great effort, in particular not automatically, to the circumferential bale wall. With a pulling-off means consisting of two rollers arranged forming a gap between the rollers for the passage of the film length, one of said rollers being driven, it particularly caused the at least unilaterally adhesive film to adhere to one of the rollers, thus preventing the film from being further pulled off from the film roll, and in particular from being applied to the bale surface area.

Please amend the paragraph beginning at line 6 on page 5 of the application as follows:

It is, for example, possible that only two instead of hitherto four layers of film are necessary. Moreover, the risk of damage is reduced for a completely wrapped round bale during transportation and handling of a finished wrapped bale, since the film is ~~no~~now pre-stressed in two directions, for one, in the circumferential direction and, for another, in 90° relative thereto. Thereby, it is possible, that a hole, involuntarily punctured through the two films during transportation, does not expand, and that actually only a small through-going hole remains. This is achieved in that the hole introduced into the film, which is pre-stressed in the circumferential direction, expands slot-shaped in the circumferential direction of the one film, and in the superposed film layer twisted by 90°, expands likewise slot-shaped by twisted by 90°. By means of the superposition of these slots staggered relative to one another by 90°, there only remains the extremely small hole, which does not cause any problems. Moreover, it has to be stated that the bales inventively wrapped in a novel manner become tighter at their circumferential or surface area by the finally resulting "cross adhesion bond." Thereby, the bale content is better protected against penetrating rain water or against short water accumulations on the bale storage ground in case of temporary flooding when used in agriculture.

Please amend the paragraph beginning at line 23 on page 5 of the application as follows:

Finally, it is to be stated that, as it is usual to date, round bales of dry hay or straw are only net-wrapped and not completely film-wrapped. In this case, however, the inventive film wrapping on the surface area instead of the net without covering the front ends, is of an important advantage for durability in an open storage. This means that rain water would not only flow off from the surface area by the existing compression of the ~~halm-shaped material~~haulm or garbage materials, but would also be prevented from penetration for the first by the film applied to the surface area. Thereby, it is of course optimal that the film webs are wider than the wrapped round bale, so that the projecting film edges can serve as a "roof."

Please amend the paragraph beginning at line 16 on page 7 of the application as follows:

An inventive film wrapping device for round bales pressed in a round bale press features a film roll holding device associated with a pulling-off device for pulling off the film from the film roll. Moreover, a film rope forming device is present by means of which a film rope can be realized in the pulled off film web over a certain film web length. For cutting the ~~foil~~film off, a cutting means is arranged downstream of the pulling-off device.

Please amend the paragraph beginning at line 1 on page 8 of the application as follows:

Alternatively thereto, a film roll holding device is ~~imaginable~~provided comprising a fastening device holding the film roll at its front side.

Please amend the paragraph beginning at line 18 on page 8 of the application as follows:

Since the pivot arms are mechanically coupled by a lever system, only one drive means is necessary for pivoting the plurality of pivot arms. Alternatively thereto, it is of course also possible to pivot each single pivot arm by a (pneumatic or hydraulic) control cylinder. Moreover, a drive by an electromotor is also ~~imaginable~~ possible. ~~In~~ The inventive film wrapping device preferably comprises a control means controlling the film rope forming device and the cutting means in such a coordinate manner that shortly before the desired number of film layers will be wrapped around the surface area of the round bale, said film rope forming device will be activated over a certain space of time so that a film rope comprising again a predetermined length will be formed. After the formation of the film rope, the cutting means is then activated so that the film, seen in the pulling off direction of the film, is cut in front of the film rope.

Please amend the paragraph beginning at line 12 on page 9 of the application as follows:

For further explanation and for a better understanding, an exemplary embodiment of the invention will be described in the following with reference to the attached drawings. ~~Therein shows:~~

Please amend the paragraph beginning at line 15 on page 9 of the application as follows:

Fig. 1 is a schematic side view of a film wrapping device of a round bale press[[,]].

Please amend the paragraph beginning at line 16 on page 9 of the application as follows:

Fig. 2 is a top plan view of the film wrapping device as per Fig. 1[[,]].

Please amend the paragraph beginning at line 17 on page 9 of the application as follows:

Figs. 3a-3[[c]]e are[[a]] schematic perspective ~~view~~views of various method steps for forming a film rope in a film web, and the guidance of same towards a pressed round bale, which, however, is not fixed on its circumferential side.

Please insert the following new paragraphs before the paragraph beginning at line 20, and before the unnumbered section heading entitled "Description of a preferred embodiment of the invention" on page 9 of the application as follows:

Fig. 4 is a schematic perspective view of an alternative embodiment of the present invention forming a film rope in a film web by twisting the film web.

Fig. 5 is a schematic of a bale press of the present invention used in conjunction with an associated wrapping table.

Please amend the paragraph beginning at line 8 on page 11 of the application as follows:

The inventive method will now be described in particular with reference to Figs. 3a-~~3e~~3e. In a round bale press as per Fig. 1, a round bale 3 is produced in the conventional manner. ~~After~~ As shown in Fig. 3a, the film has been guided once through between the rollers 6, 7, it will adhere to the round bale 3 due to its adhesive inner side, and will be carried along through rotation of the round bale 3 by means of the endless belt 2.

Please amend the paragraph beginning at line 13 on page 11 of the application as follows:

Shortly before the desired number of film layers is reached, the pivot arms 14 are inwardly pivoted, as shown in Fig. 3b, so that the rolls 19' bring together the film web edges of film web-~~15~~12, and the film web in-between is gathered up, whereby with further pulling off the film, a film rope 13 having higher rigidity arises over a certain film web length. ~~Said~~ As shown in Fig. 3c, the film rope 13 is guided through the gap of the rollers 6, 7, and is then cut off by means of the cutting device 22. The finished wrapped round bale 3 is guided out from the press, and the production of a new round bale 3' starts, such as it is shown in Fig.-~~3e~~3d. As soon as the round bale 3' is completely pressed, the film rope is guided through the rollers 6, 7 between the round bales 3' and the endless belt 2, and by driving the endless belt 2, as shown in Fig. 3e, the film is carried along, so that after the pivot arms 14 have opened, the film web 12 gets in contact in its full width with the circumferential side of the round bale again. As soon as the desired layer number is reached on round bale 3' again, there ensues anew the formation of a film rope.

Please add the following new paragraphs beginning after line 29 on page 11 of the application:

Fig. 4 depicts an alternative, exemplary method for forming a film rope with the round bale press of Fig. 1. In this embodiment a twisted film rope 13' is formed by gathering the film web 12 between the rolls 19 to create a pinched film rope 13 as before and then twisting the pinched film rope 13 between rotating rolls 19'' to create a twisted film rope 13'. The twisted film rope 13' then passes through the rollers 6,7 and is fed into the baler. The length of twisted film rope 13' provides a substantial lead to instantiate the wrapping of the film web 12 about the round bale 3'' within the bale press. As in previous embodiments, the twisted film rope 13' allows the adhesive film web 12 to pass through the rollers 6,7 without the adhesive side of the film web 12 sticking to the adjacent roller 7. Once the twisted film rope 13' wraps around the round bale 3'' a few times, the rotating rolls 19'' may be removed, and the full width of the film web 12 may be fed to the rollers 6, 7. Because the round bale 3'' is rotating within the bale press, it continues to pull the film web through the rollers 6, 7, thus preventing the adhesive side of the film web from sticking to the adjacent roller 7. In Fig. 4, the rolls 19 are depicted in an open position after having pinched the film web 12 together for a prescribed period of time. This allows the film web 12 to be wrapped around the bale at the full width of the film web 12 once the twisted film rope 13' engages the bale 3''.

Fig. 5 depicts the round bale press of the present invention in combination with an adjacent wrapping table 34. Once the bale 3 is initially wrapped within the bale press, more complete wrapping can also be carried out in a downstream film wrapping device 30. By forming a single layer or multiple layers of the adhesive film web on the cylindrical wall of the bale 3, sufficient strength and stability of shape for the further transportation of the bale 3 to the film wrapping device 30 is provided. The film-stabilized round bale 3 is output from the round bale press and transferred to a wrapping table 34, on which the round bale 3 is then completely wrapped with film. The bale 3 may be placed on its cylindrical sidewall on the wrapping table 34, allowing the wrapping table 34 to rotate the bale 3 about its axis. While the bale 3 rotates on the wrapping table, the wrapping arms 32 of the film wrapping device 30 revolve around the bale 3 to wrap film about the bale in an end-over-end fashion. By rotating the bale 3 on the wrapping table 34 simultaneously with the revolutions of the wrapping arms 32, the bale 3 is quickly completely encapsulated by the film web. The bale 3 is then output from the wrapping table 34, for example, onto a palette, for transportation. The risk of damage is reduced for a completely wrapped round bale 3 during transportation and handling of a finished wrapped bale,

since the film is now pre--stressed in two directions, i.e., circumferentially around the cylindrical surface of the bale 3 and also over the axial ends of the cylindrical bale 3.